

## CARLIA PARRHASIUS, A NEW QUEENSLAND SKINK

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*Carlia parrhasius* sp.nov. is described from the Glennie Tableland, an isolated sandstone block on NE Cape York Peninsula, it is distinguished from its congeners by bold brown/black and white body stripes, combined with a fire-red tail. □ *Scincidae*, *Carlia parrhasius*, Cape York Peninsula, sandstone, *Morethia*.

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Skinks of the genus *Carlia* are well known in Australia, especially in the NE, where they are conspicuous for their large populations and high species diversity. Twenty-one species are recognised (Ingram & Covacevich, 1989). Colour and pattern are important in distinguishing the species, because there is considerable overlap in many scale characters. Most known *Carlia* spp. are some shade of brown and have an array of distinct spots, dashes or stripes by which most can be distinguished readily. Male breeding colours are sometimes especially distinct (Ingram & Covacevich, 1980, 1989). Our new four fingered *Carlia* may be distinguished in form and size from other Australian genera of four-fingered skinks, except *Lygisaurus*. It is excluded from *Lygisaurus* by its high supradigital scale count on the fourth toe ( $>10$ ). All *Lygisaurus* species have  $<10$  supradigital scales on the fourth toe. The colour and pattern of the new skink are both boldly distinct amongst *Carlia*, and highly convergent with five-fingered *Morethia*, which has a fused lower eyelid (vs the moveable eyelid in *Carlia*). The new species has a brown/black and white striped body with a fire-red tail. Field and first-level laboratory examinations suggested assignment to *Morethia*.

Abbreviations used are: Queensland Museum QM; far northeastern Queensland, FNEQ; snout-vent length, SVL.

### SYSTEMATICS

*Carlia parrhasius* sp. nov.  
(Figs 1, 2)

#### MATERIAL EXAMINED

HOLOTYPE: QMJ57868, Azure Creek, at  $140 \pm 20$  m, Glennie Tableland, Cape York Peninsula,  $12^{\circ} 21.96'S$ ,

$142^{\circ} 56.71'E$ ,  $\pm 250$  m, FNEQ, P.J. Lethbridge & J.W. Winter, 25 Apr 1993.

PARATYPES: QMJ57867, QMJ57869, 24 Apr 1993. Other collection details as for holotype.

#### DIAGNOSIS

Body black and white striped with fire-red tail is a unique colour pattern in *Carlia*. Dorsal scales with weak carinations made up of a series of points, and long, acute ear lobules are shared with 2 (of 3) species restricted to rock habitats (*C. rimula*, *C. scirtetis*) which also have distinct colour patterns (Ingram & Covacevich, 1989), but bear no resemblance to *C. parrhasius*.

#### DESCRIPTION

*Holotype*. SVL 27.4 mm. Lengths (% SVL). Tail 77.0% (damaged), forelimb 30.6%, hindlimb 40.7%, head length 23.5%, head width 14.9%, axilla-groin 46.1%.

Prefrontals large, moderately spaced. Frontal elongate, 1.4 times as long as wide. Internasal and frontal scales in contact. Frontoparietals fused forming a single shield. Interparietal free. Parietal scales in broad contact behind the interparietal. Enlarged nuchal scales 2. Nuchal scales in contact with the posterior edge of the parietals 4. Supralabials 7, fifth largest and below eye. Infralabials 6-7. Presuboculars 2. Loreals 2. Supraoculars 4, first two in contact with frontal. Supraciliaries 7. Lower eyelid movable. Transparent palpebral disc occupying more than half the lower eyelid. One primary temporal. Secondary temporals 2, upper largest and overlapping lower. Ear aperture round, much smaller than palpebral disc and surrounded by long acute lobules. Postmental in contact with first 2 infralabials. Midbody scale rows 28. Paravertebrals 49.

Mid-dorsal scales with smoothly curved



FIG. 1. Holotype of *Carlia parrhasius* sp. nov., QMJ57868 (G. Cranitch).

posterior edges; dorsal and lateral scales with weak carinations, broken up into a series of smaller points. Digits on forelimb 4. Digits on hindlimb 5. Subdigital lamellae (fourth toe) 27, smooth. Plantar scales rounded. Supradigital scales (fourth toe) 12.

Brown/black ground colour broken by silvery-white longitudinal stripes (midlateral, dorsolateral and vertebral). The midlateral and dorsolateral stripes run from the sides of the head to the base of the tail, broadening posteriorly to the hindlimbs. The vertebral stripe is shorter, beginning on the nape and running slightly beyond the hindlimbs. Head coppery-brown. Limbs mid-brown, speckled with white. Tail unpatterned along most of its length, and flushed with red. Venter, silvery-white.

*Paratypes.* SVL 26.2–33.5mm. Lengths (% SVL). Tail 149.6% (regenerated)–195.8% (original), forelimb 29.7–30.8%, hindlimb 39.1–40.9%, head length 21.7–24.4%, head width 14.0–16.2%. Prefrontals large, moderately to widely spaced. Internasal and frontal scales in moderate to broad contact. Supralabials 6–7, usually 7. Infralabials 6. Midbody scale rows 27–28. Subdigital lamellae (fourth toe) 26–27. Supradigital scales (fourth toe) 11. QMJ57867 similar to holotype in pattern and colour. QMJ57869 has a mid-brown ground colour and less clearly defined stripes and a midlateral stripe which is only just discernible. Its tail is mid-brown, lacking any red.

#### HABITAT

The Glennie Tableland is a sandstone plateau (Fig. 3) of the Mesozoic Gilbert River Formation (Willmott & Powell, 1977), 60km NW of the Lockhart Aboriginal Community. The plateau is c.20km N-S and 10km at its widest point. The main escarpment faces east, rising from the coastal plain to nearly 300m, with a less pronounced escarpment on the western side, where the

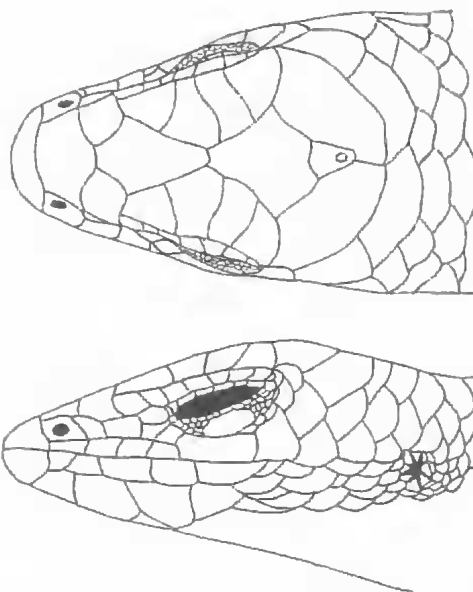


FIG. 2. *Carlia parrhasius* sp. nov., QMJ57869. Dorsal and lateral views of head.

tableland falls to the inland rolling downs at about 140m. Deeply incised valleys radiate out from the plateau and drainage is mainly into the Olive River. Sandstone cliffs, usually in a 2–3 terraces, with cliffs upto 15m in height, line the incised valleys, particularly along the N and E sides of the plateau. The predominant vegetation is grassy eucalypt woodland, with numerous patches (the largest of about 50ha) of mesophyll vine forest at the heads of the deeply incised valleys. Small patches of windswept low heath occur on the summit. The plateau is the best developed sandstone cliff habitat north of the 'Quinkan Country' in the Laura district.

*C. parrhasius* was collected on large sandstone fragments at the base of the cliffs and the talus slope below them. Vegetation was grassy eucalypt woodland, canopy height c.15m, with dominant trees including Darwin Stringybark (*Eucalyptus tetradonta*), a bloodwood (*E. cf. hylandii*) and Cooktown Ironwood (*Erythrophloeum chlorostachys*). The understorey contained scattered Bushman's Clothes Peg (*Grevillea glauca*) and an Acacia (*Acacia cf. crassicaarpa*). Ground cover was of medium- dense grass, up to 1.5m tall, on rocky ground.

#### ETYMOLOGY

For the Greek artist, Parrhasius, a master of deception through his work.



FIG. 3. Habitat of *Carlia parrhasius*, Glennie Tableland, Cape York Peninsula (J. Winter).

#### REMARKS

The holotype and paratype ♀ (QMJ57867) share the same bold colour and pattern; the larger paratype ♂ (QMJ57869) is basically brown (vs black), possibly due to age or preservation. We

suggest from these meagre data, that the pattern in *C. parrhasius* may be a juvenile character.

Black and white striped bodies and red tails are seen in *Ctenotus* spp. (*C. decaneurus*, *C. leae*, *C. striaticeps*, some *C. taeniolatus*); *M. ruficauda*, *M. storri*; and some *Proablepharus kinghorni*. One striking foreign example is *Lygosoma punctata*, from Sri Lanka (da Silva, pers.comm). Red tails have been observed in the males of several *Carlia* spp. during the breeding season and in some species of *Lygisaurus*.

#### ACKNOWLEDGEMENTS

The Glennie Tableland was selected for survey in the Cape York Peninsula Land Use Strategy by John Winter, who was also co-collector of the type specimens. Mr Fred Sebullia allowed the survey team access to the Glennie Tableland. Gary Cranitch and Bruce Cowell prepared the photographs. Keith McDonald and Glen Ingram provided helpful comments on the manuscript.

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